

WHAT IS CLAIMED IS:

1. A method for managing a foreign mobile subscriber in a visitor location register (VLR) of a mobile switching center (MSC) to provide a roaming service,
 5 comprising the steps of:

(a) upon receipt of a call request from a mobile terminal, determining whether a
 subscriber of the mobile terminal is a foreign mobile subscriber by checking a mobile
 country code (MMC) and a mobile network code (MNC) of an international mobile
 subscriber identification (IMSI) number received from the mobile terminal;

(b) determining whether a number of the mobile country code country for which
 10 roaming service is established by checking if the country code received from the foreign
 mobile subscriber exists in a country code index table of the VLR when the subscriber in
 step (a) is determined to be a foreign mobile subscriber;

(c) determining whether the service provider of the foreign mobile subscriber is a
 15 roaming service provider by checking a service provider index table after determining that
 roaming service for a country of the foreign mobile subscriber is established by checking
 the country code identified in step (b); and

(d) providing service to the foreign mobile subscriber while managing the
 corresponding number in the order of the country code index table number, the service
 20 provider index table number and a mobile station identification number (MIN) after
 determining that the service provider of the foreign mobile subscriber is a roaming service
 provider identified in step (c).

2. The method as claimed in claim 1, wherein step (b) includes not providing service by discarding the call request from the foreign mobile subscriber when the country code of the foreign mobile subscriber does not exist in the country code index table.

5 3. The method as claimed in claim 2, wherein the country code index table comprises a table in which a prefix is comprised of the MMC and the MNC of the IMSI, and the table has an index value corresponding to the roaming service country code.

10 4. The method as claimed in claim 1, wherein the country code index table comprises a table in which a prefix is comprised of the MMC and the MNC of the IMSI, and the table has an index value corresponding to the roaming service country code.

15 5. The method as claimed in claim 3, wherein the service provider index table has an index value corresponding to a public land mobile network (PLMN) value of the IMSI value.

20 6. The method as claimed in claim 4, wherein the service provider index table has an index value corresponding to a public land mobile network (PLMN) value of the IMSI value.

7. A method for managing data of a VLR including a country code index table and a service provider index table for a roaming service of a foreign mobile subscriber in an MSC, comprising the steps of:

upon receipt of country code table data and service provider index table data for the roaming service of the foreign mobile subscriber from a device connected to the MSC, checking a class of an operator from which the data is transmitted; and

updating the country code index table data and the service provider index table data in the VLR, when the operator's class is an accessible class.

8. The method as claimed in claim 7, wherein the country code index table comprises a table in which a prefix is comprised of MMC and MNC of the IMSI, and the table has an index value corresponding to the roaming service country code.

9. The method as claimed in claim 8, wherein the service provider index table has an index value corresponding to a PLMN value of the IMSI.

10. The method as claimed in claim 7, wherein the service provider index table has an index value corresponding to a PLMN value of the IMSI.